# A NEW SPECIES OF ANTHIDIUM FROM CALIFORNIA 

(Hymenoptera: Megachilidae)<br>Elbert R. Jaycox<br>Entomology Research Division, Agric. Res. Serv., U.S.S.D.A., Logan, Utah ${ }^{1,2}$

This paper is presented to provide a name for use in a paper on the anthidiine bees of California being prepared by Dr. Albert A. Grigarick, University of California, Davis. The author examined material from the collections of University of California at Riverside, Berkeley, and Davis, University of Kansas, and the California Academy of Science. Thanks are due P. H. Timberlake, A. A. Grigarick, and G. I. Stage who provided specimens and to G. E. Bohart and Karl V. Krombein for their suggestions and review of the manuscript. The holotype will be deposited in the California Academy of Science and paratypes will be distributed to the U.S. National Museum and the collections listed above.

## Anthidium pallidiclypeum Jaycox, new species

Male.-Length about 13 mm , forewing length 9 mm . Base body color deep brown to black. Hair white on venter, sides and clypeus, grading into off-white or tan on dorsum. Head: Black; clypeus, spot above each eye, lateral face marks to level of antennal sockets, mandibles except apical teeth, cream color; labrum with dorsal projections; facial hair heavy to level of ocelli; clypeus coarsely punctate overall with narrow translucent rim at aper. Mesosoma: Black; tubercles, tegulae except for central spot, two stripes on scutellum, basitarsi, external stripe on tibiae, various spots or apical stripes on femora, light yellow. Metasoma: Deep brown to black; four spots on first and second metasomal terga, medially interrupted broad bands with anterior notches on terga three to five, four spots on sixth tergum, lateral ones small and on straight lateral spines, two spots on pygidium, light yellow. Apical rim of tergum five without hair and bearing punctures in chainlike arrangement, one or less puncture width apart , $10-12$ punctures $/ 0.33 \mathrm{~mm}$ ). Punctures on rest of tergum of two sizes, in less conspicuous chains two or more widths apart. Pygidium (fig. 1) narrowed caudally, processes broad, about same width as distance to central spine, broadly angulate apically, sinus shallow; seventh metasomal sternum (fig. 3) broadly rounded without lateral lobes but with central carina extending half way across sternum from anterior edge; minth metasomal sternum (fig. 2) bifurcate at apex, the bifurcate portion bent ventrally; setal brush on fifth sternum off-white, about one-third as wide as sternum and with straight caudal edge.

Female.-Length about 10 mm , forewing length 8 mm . Basal body color and hair as in male, scopa white with dark brown apex. Head: Similar to male but differing as follows: clypeus with basal black area and anteriorly flattened black apical rim; clypeal margin sinuous centrally with paired

[^0]lateral projections, small outer and prominent, smoothly rounded inner ones (fig. 4) ; stripe above each eye, lateral fave marks triangular, mandibles sexdentate. Mesosoma: As in male but with narrow lines of yellow on scutum beside tegulae. Metasoma: As in male but differing as follows: pygidium with central notch as wide as deep; central section subtruncate, twice as wide as lateral sections; lateral portions broadly angulate without toothlike projections (fig. 5).

Holotype male (CAS), San Bernardino Mountains, California, 3800 feet, May 15, 1937 on Ceanothus (E. G. Linsley).


Figs. 1-3. Diagnostic characters of male Anthidium pallidiclypeum,

Paratypes, 23 males, 13 females, all from California, May 15 to July 12, as follows: Los Angeles Co.: Tanbark Flat, part on Lotus (R. L. Anderson, R. C. Bechtel, T. R. Haig, J. C. Hall, H. L. Hansen, P. D. Hurd, W. O. Marshall, H. L. Mathis, A. T. McClay, H. R. Moffitt, J. H. Nakata) ; Riverside Co.: Anza (H. R. Moffitt), Pinon Flat, San Jacinto Mts., (C. D. Michener, E. C. Van Dyke), Gavilan, on grass and Lotus scoparius (C. M. Dammers, P. H. Timberlake) ; San Bernardino Co.: Cajon Pass (E. C. Van Dyke), Lake Arrowhead 10 miles north, Desert Springs (P. H. Arnaud, Jr.), San Bernardino Mts., 3800 feet, on Ceanothus (E. G. Linsley), Deep Creek, on Lotus scoparius (P. H. Timberlake), Adelanto 10 miles south, at Salazaria (P. H. Timberlake) ; Monterey Co.; Hastings Nat. Hist. Res., Jamesburg, one on Collinsia bicolor (C. D. Michener)

The color patterns of specimens examined show considerable variation, the usual condition among Anthidium species. Para-


Fig. 4. Clypeus, $:$


Fig. 5. Pygidium, of
Figs. 4-5. Diagnostic characters of female Anthidium pallidiclypeum.
type males differ from the type most often in having interrupted stripes on one or more tibiae, and in the metasomal maculation. Most specimens have four spots on the first metasomal tergum only rather than on the first two segments as on the type. About half also have uninterrupted bands on one or more terga. Female specimens are less variable in maculation than males. About half have two distinct black spots basally on the clypeus rather than an irregular area as described. Four paratype females have no color on scutum, while one has " $L$ " shaped stripes at the anterior scutal edges and also has four spots on the scutellum.

The clypeal color of both sexes is pale cream, usually noticeably lighter than the yelow color on the rest of the body. This character, together with the striking black, flattened clypeal rim of the female, with its rounded marginal projections, and the single lobe of the male seventh metasomal sternum, facilitates the identification of pallidiclypeum. The lateral edges of the male seventh metasomal sternum curve downward and, unless viewed at right angles to the sternum, may appear to be lateral lobes or toothlike projections. The species does not appear closely related to others in the genus and is known only from California in Upper and Lower Sonoran zones.

## UNUSUAL CERAMBYCID ANTENNA Paul D. Gerhardt and Don L. Turley ${ }^{1}$

A black light trap has been operated the year around for several years at The University of Arizona Mesa Branch Station. Its purpose is to observe and record the flights and activity of certain species of moths whose larvae are pests of economic importance in this area.

During a routine examination of one night's catch in September 1961, a trapped male cerambycid beetle, Megacyllene antennatus (White), was noticed which was different from others previously observed. The left antenna of this beetle appeared enlarged near the tip. A closer examination revealed that the 10th segment was enlarged and had a chelicera-like structure on its outer edge. Yet, the corresponding segment on the right antenna appeared normal. The antennae of this specimen as well as an apical closeup of the left antenna are shown in figure 1. Note

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